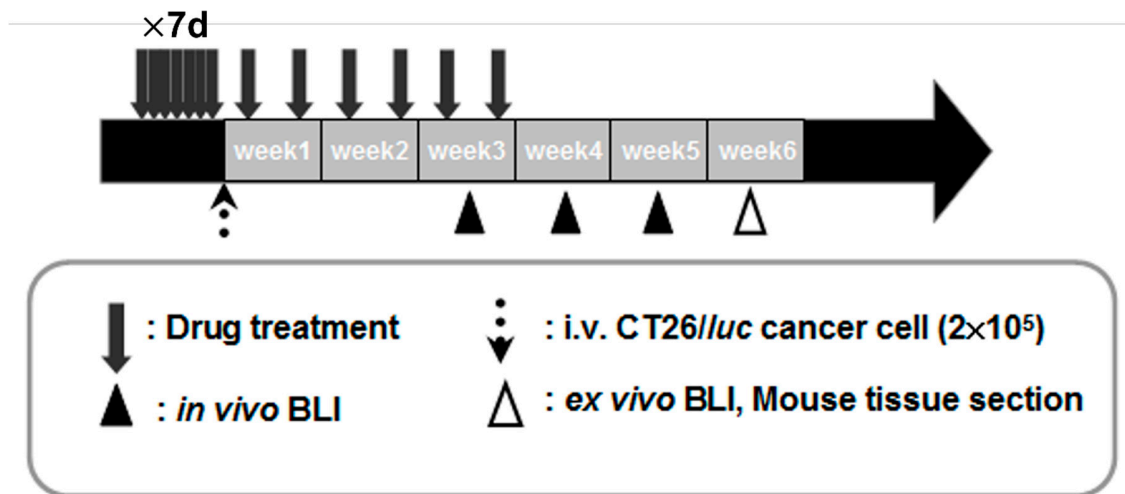


**Supplementary Figure 1.** The correlation between cell numbers and photon flux of CT26/luc cells. Different numbers of CT26/luc cells were plated in a 96-well plate and treated with *D*-luciferin. Emitted photons were acquired by IVIS50 and quantified as photon flux (photons/sec). The correlation curve of cell numbers and emitted photon flux was established with  $R^2=0.9861$ .



**Supplementary Figure 2.** The details of *in vivo* experiment. Male BALB/C mice received 7-day treatments prior to the intravenous injection of CT26/*luc* cells. Different treatments were continued throughout the study, and BLI was utilized to monitor tumor progression from week 3 to week 5. The mice were euthanized on week 6, and organs/tissues were collected for *ex vivo* BLI and histopathological analysis.